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TEMPERATURE CONTROLLER

RT-826

WARRANTY. The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase.
Contact your dealer or directly with us.
More information how to make a compliant can be found on the website:
www.fif.com.pl/reklamacje

5 9 0 8 3 1 2 5 9 4 5 1 2

Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.

Purpose

The RT-826 temperature controller is designed for direct control of heating and ventilation devices to maintain a constant ambient temperature.

Controller features

* Operating mode: heating/cooling
* Correction of indication ± 9°C
* Alarm if the temperature exceeds the set value by 5°C
* Projection of the currently measured temperature value

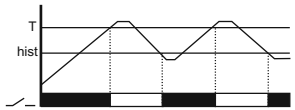
Functioning

The controller, depending on the selected operating mode, is designed to control heating or cooling equipment. In operating mode, the value of the currently measured temperature is indicated on the display. Closing the controller contact (switching on the controlled device) is indicated by a red LED light ( ). Temperature and hysteresis and operating mode selection is done using two buttons on the front of the controller. Exceeding the temperature by 5°C from the set one is signaled by the pulsation of the display. Optionally, the controller can indicate exceeding the measured temperature by 5°C using sound and visual signaling.

Operating modes

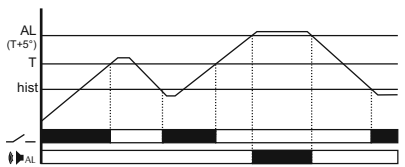
-H- HEATING mode

Until the desired ambient temperature is reached, the relay contact is closed (heating device switched on). When the set temperature is reached, the contact opens (heating device switched off). The temperature drop by the hysteresis value causes the contact to close again. Exceeding the measured temperature by 5°C above the set temperature is indicated by a rapid pulsation of digits (measured value) on the display.



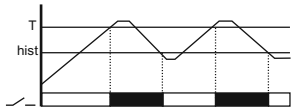
-H6- - HEATING mode with alarm feature [+5°C]

As in the *-H-* mode. If the temperature is exceeded by 5 °C above the set temperature, an alarm will sound. Optionally, it is possible to connect external light signal that work together with sound signaling.



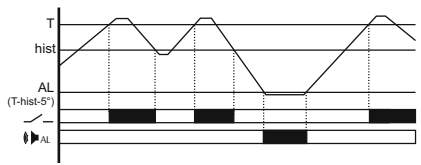
-O- - COOLING mode

Until the desired ambient temperature is reached, the relay contact is closed (cooling device switched on). When the set temperature is reached, the contact opens (cooling device switched off). The temperature rise by the hysteresis value causes the contact to close again. Drop in the measured temperature by 5°C below the set temperature is indicated by a rapid pulsation of digits (measured value) on the display.



-O6- - COOLING mode with alarm feature [-5°C]

As in the *-O-* mode. If the temperature drops by 5 °C below the set hysteresis , an alarm will sound. Optionally, it is possible to connect external light signal that work together with sound signaling.



Programming

SETTING THE OPERATING MODE AND HYSTERESIS

Operating mode

In operating mode, simultaneously press the "+" and "-" buttons for a short time (<1 s). The "- - -" symbol will appear on the display (mode and hysteresis selection level). Press the +/- button to select the operating mode setting (possible symbols: *-H-; -H6-; -O-; -O6-*). Press "+" and "-" buttons simultaneously and hold until the symbol on the display pulsates (>5 s). Release the buttons. The display will stop flashing. Press "+/-" to select the operating mode. After 5 seconds of inactivity, the operating mode will automatically be saved and the system will return to mode and hysteresis selection level (- - -). Press the "+" and "-" buttons simultaneously for a short time(<1 s). The controller will return to operating mode (indication of the measured temperature) and will automatically start to operate with the new settings.

Hysteresis

In operating mode, simultaneously press the "+" and "-" buttons for a short time (<1 s). The "- - -" symbol will appear on the display (mode and hysteresis selection level). Press the +/- button to select the hysteresis setting (for example, symbol *H01* as a previously set hysteresis value). Press "+" and "-" buttons simultaneously and hold until the symbol on the display pulsates (>5 s). Release the buttons. The display will stop flashing. Press "+/-" to select the hysteresis value. After 5 seconds of inactivity, the hysteresis level will automatically be saved and the system will return to selection level (- - -). Press the "+" and "-" buttons simultaneously for a short time(<1 s). The controller will return to operating mode (indication of the measured temperature) and will automatically start to operate with the new settings.

TEMPERATURE SETTING AND PREVIEW

Preview

In operating mode, briefly press (<1 s) the "+" or "-" button. The value of the set temperature will appear on the display. After 5 seconds the controller will return to operating mode (measured temperature indication).

Setting

In operating mode, press the "+" or "-" buttons briefly (<1 sec). The value of the set temperature will appear on the display. Press "+/-" to set the new temperature value. After 5 seconds of inactivity, the controller will return to operating mode (measured temperature indication) and automatically start to operate with new settings.

SETTING OF CORRECTION OF TEMPERATURE INDICATIONS

In operating mode, simultaneously press the "+" and "-" buttons and keep it pressed until the *„-8-"* symbol appears on the display. Release the button. The previously set correction value appears on the display, for example *02*. Press "+/-" to set the new correction value (range -9 ÷ 9 °C). After 5 seconds of inactivity, the controller will return to operating mode (measured temperature indication) and will automatically start to operate with the new settings.

Sygnalizacja błędów:
01 - zwarcie sondy pomiarowej
02 - brak sondy lub przerwa w jednym z przewodów

Assembly

1. Turn the power off.
2. Fix the controller on the rail in the distribution box.
3. The controlled receiver must be connected in series to terminals 1-2 (separated contact of the controller).
4. Install the temperature probe at the temperature measurement location and connect it to the controller. Make sure that the temperature sensor is not close to heating or ventilation devices. If necessary, the probe wire can be extended by 10 m. If the cable is longer, there may be errors in the relay's operation.

5. Opcjonalnie do zacisków 7-8 (wyj. AL) podłączyć szeregowo urządzenie sygnalizacji wizualnej (lampka).
6. Załączyć zasilanie.
7. Dokonać nastawy programu regulatora.

Technical data

power supply	230V AC
current load	<16A
contact	1×NO
temperature regulation range	-25÷130°C
adjustable hysteresis	1÷30°C
setting accuracy	1°C
measurement accuracy	±1°C
temperature sensor	KTY 81-210
sound signal	DAP12 buzzer
resonant frequency	2.4kHz
volume	80dB
visual signal output	open collector (OC)
connection voltage	12÷24V DC
current	<30mA
display	3× LED segment 5×9mm
contact signalling activation	red LED
temperature probe	
-25÷60°C	RT
-25÷130°C	RT2
power consumption	1.1W
working temperature	-25÷50°C
terminal	2.5mm² screw terminals
dimensions	2 modules (35mm)
mounting	on TH-35 rail
protection level	IP20

Dedicated temperature probes [F&F]

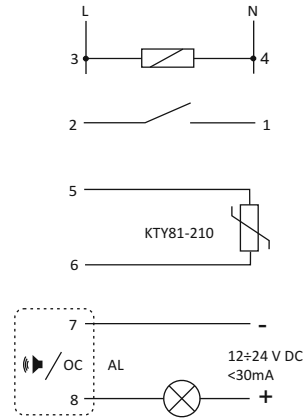
RT

temperature sensor	KTY 81-210
sensor dimensions	Ø5; h=20mm
sensor isolation	heat shrink
wire	OMY 2×0.34mm²; l=2.5m

RT2

temperature sensor	KTY 81-210
sensor dimensions	Ø8; h=40mm
sensor isolation	brass muff
wire	SIHF heatresist 2×0.5mm²; l=2.5m

Wiring diagram



IN/OUT description

1-2	NO contact
3-4	230 V power supply
5-6	temperature probe inputs
7-8	AL output light signalling alarm output open collector type